(b) No eligible IFS officer is "waiting" for posting.

(c) Only two posts of Ambassadors/High Commissioners are currently vacant in Missions abroad. The process for selection and appointment of suitable Ambassadors/ High Commissioners to these countries is already in hand.

WRITTEN ANSWERS TO UNSTARRED QUESTIONS

Setting up of Nuclear Power Units

2580. DR. Y. LAKSHMI PRASAD: Will the PRIME MINISTER be pleased to state:

(a) whether Government propose to set up more nuclear power units for the larger benefit of society; and

(b) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENREGY (SHRIMATI VASUNDHARA RAJE): (a) Yes, Sir.

(b) Proposal for nuclear power development in the Ninth Five Year Plan include commencement of 2x500 MWe plant at, Tarapur (TAPP-3&4) and additional 2x220 MWe Unit at Kaiga (Kaiga-3&4), besides commissioning of the Detailed Project Report (DPR) for the 2x1000 MWe Nuclear Power Station at Kudankulam in Tamil Nadu with Russian Assistance and the commencement of work on the Prototype Fast Breeder Reactor (PFBR) of 1x500 MWe towards the end of the IX plan. Setting up of further Projects progressively during X Plan and XI Plan periods will depend on the availability of financial resources.

Nuclear Power Stations

2581. SHRI C. RAMACHANDRAIAH: Will the PRIME MINISTER be pleased to state:

(a) the details of the Nuclear Power Stations presently functioning under the Nuclear Power Corporation (NPC)

(b) the power produced by these nuclear power stations during the last three years, station-wise and whether the same is as per their targeted capacity;

(c) whether lately these nuclear power stations have shown a lot of improvement in their production and the NPC expects to double its production;

(d) if so, the reasons therefor and the estimated production of nucelar power during the current year and the next year; and

(e) the estimated cost of production per unit by NPC as compared to the production by others?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (SHRIMATI VASUNDHARA RAJE): (a) and (b) The details of Nuclear Power Stations presently functioning under NPCIL, location rated capacity and generation of electricity during last three years are given in the table below. The generation of electricity has been as per station capacity and the annual average capacity factors indicated below:

Location/Stations	Units	Capacity (MWe)	Generation in MUs 1998-99	1999-2000	2000-01
Maharashtra—Tarapur	TAPS-1	160	1298	941	1289
Tarapur Atomic Power Station	TAPS-2	160	996	1214	1119
Rajasthan—Rawatbhata	RAPS-2	200	990	1405	1600
Rajasthan Atomic Power Station	RAPS-3	220	*	15	1462
	RAPS-4	220	*	*	273
Tamil Nadu—Kalpakkam	MAPS-1	170	1123	1042	1128
Madras Atomic Power Station	MAPS-2	170	1065	1189	1387
Uttar Pradesh—Narora	NAPS-1	220	1316	1602	1556
Narora Atomic Power Station	NAPS-2	220	1492	1529	1488
Gujarat—Kakrapar	KAPS-1	220	1388	1645	1831
Kakrapar Atomic Power Station	KAPS-2	220	1506	1750	1663
Karnataka—Kaiga	KGS-1	220	*	*	578
Kaiga Atomic Power Station	KGS-2	220	*	128	1322
Total (NPCIL)		**2620**	**11174**	**12460**	**16696**
Annual average capacity factor	%	75	80	82	

In addition, generation from RAPS1 (100 MWe), owned by DAE, during the years 1998-99, 1999-2000 and 2000-01 was 827, 934 and 517 MUs respectively. *KGS-2, RAPS-3, KGS-1 and RAPS-4 commenced commercial operation from 16.03.2000, 01.06.2000, 16.11.2000 and 23.12.2000 respectively.

(c) There is a considerable improvement in the performance over last three years. The present Nuclear Power capacity base is 2720 MWe. Construction works are in progress on 2x500 MWe (TAPP- 3&4) at Tarapur, Maharasthtra and 2x220 MWe (Kaiga-3&4) at Kaiga, Karnataka. In addition further nuclear power stations are also planned. Thus the present capacity base of 2720 MWe is expected to increase to 3940 MWe by the end of X Plan and to about 9100 MWe by the end of XI Plan subject to availability of financial resources.

(d) The improvement in station performance has been on account of root cause analysis, operator training and cutting down of outage timings by better outage management. For the year 2001-02, the target is production of 15518 Million Units (MUs). The target for the next year, which is yet to be finalised, is also of the order of 16000 MUs since the capacity base remains the same.

(e) The cost of electricity production from nuclear power plants is comparable to the cost from other contemporary coal thermal power plants located away from coal pit-heads. The table below gives the present generation tariffs of electricity for different Nuclear Power Stations.

Units	(Paise/KWh)
TAPS-1&2	83.86
RAPS-2	215.00
MAPS-1&2	193.18
NAPS-1&2	230.15
KAPS-1&2	274.15
KGS-1	295.00
KGS-2	310.00
RAPS-3	278.00
RAPS-4	295.00

The difference in tariff of different units is on account of different years of commencement of commercial operations.

Induction of fast breeder reactor

2582. SHRI SOLIPETA RAMACHANDRA REDDY: Will the PRIME MINISTER be pleased to state:

(a) whether Government propose to induct more fast breeder reactors in the country in view of requirements of electric power;

(b) if so, the details thereof; and

(c) if not, how environmental friendly power is proposed to be produced?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (SHRIMATI VASUNDHARA RAJE): (a) and (b) Yes, Sir. In first instance, it is proposed to set up a 500 MWe Prototype Fast Breeder Reactor (PFBR) at Kalpakkam. The project is awaiting necessary approvals, so as to start the construction at the earliest.

(c) In view of (a) and (b) does not arise.